

## Patterns and predictors of uncontrolled hypertension among adults with hypertension in Sri Lanka

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**Introduction and Objectives:** Hypertension control remains suboptimal globally, particularly in low- and middle-income countries, with many treated individuals failing to achieve target blood pressure (BP). This study aimed to describe the profile of individuals with treated but uncontrolled hypertension identified during May Measure Month Sri Lanka 2024 and evaluate factors associated with poor BP control.

**Methods:** A national cross-sectional opportunistic BP screening was conducted across all nine provinces of Sri Lanka (May–July 2024). Adults aged  $\geq 18$  years underwent three standardized BP measurements using validated automated devices, with the mean of the second and third readings analysed. Hypertension was defined as SBP  $\geq 140$  mmHg, DBP  $\geq 90$  mmHg, or antihypertensive use. Individuals on treatment were classified as controlled or uncontrolled. Sociodemographic, lifestyle, anthropometric, and comorbidity data were collected via interviewer-administered questionnaires.

**Results:** Despite prior diagnosis and treatment, 685 had uncontrolled BP. Most were  $\geq 60$  years (59.0% n=404), female (64.7% n=443). A Majority (95.0%) had undergone a BP assessment within the past year. Most participants were receiving monotherapy (57.5%), while 23.4% were on dual antihypertensive therapy. Statin and aspirin use was reported by 55.8% and 26.1%, respectively. Among the uncontrolled, 36.9% had co-morbid diabetes. A pescetarian dietary pattern (OR 0.27, p=0.038) and prior myocardial infarction (MI) ( $\chi^2=7.92$ , p=0.005) was associated with significantly lower odds of uncontrolled hypertension among treated.

**Conclusions:** Uncontrolled hypertension remained common among treated individuals. Pescetarian diet and prior MI were associated with better BP control, likely reflecting dietary effects and intensified secondary prevention following MI.